Characteristics

Pressure:	relative / absolute (up to 16 bar)
Range:	0...0,1 bar up to 0...1000 bar
Output:	4...20 mA / 0...20 mA / 0...10 V / 0...5 V
Accuracy:	0,5% of span (option: 0,25% of span)
Temperature of medium:	-30...+100 °C (option: -40...+125°C)
Material enclosure:	CrNi steel
Pressure connection:	G 1/2 / G 1/4 / 1/2 NPT / 1/4 NPT
Electrical connection:	see technical data
Protection:	IP67 (IP65 with L-connector)

Technical data

Pressure input

Relative pressure:	0...0,1 up to 0...1000 bar / -1...0 bar
Absolute pressure:	0...0,25 bis 0...16 bar
Ranges:	see table page 2
Overpressure safety:	see table page 2
Burst pressure:	see table page 2

Analog output

4...20 mA:	2-wire	Load:	maximum (U+ - 10 V) / 0,02 A
0...20 mA:	3-wire	Load:	maximum (U+ - 3 V) / 0,02 A
0...10 V:	3-wire	Load:	>10 kΩ
0...5 V:	3-wire	Load:	>5 kΩ

Adjustability: ±5% with potentiometer inside the instrument (zero / span)
Response time 10...90%: <1ms for ranges up to 25 bar
<10 ms at medium temperature <-30 °C for ranges up to 25 bar

Performance

Accuracy:	<0,5% of span
Option:	<0,25% of span (for ranges >0,25 bar)
	Including non-linearity, hysteresis, zero and full scale error (corresponds to error of measurement per IEC 61298-2)
Accuracy BFSL:	<0,25% of span
Option:	<0,125% of span (for ranges >0,25 bar)
Adjustment:	in vertical mounting position with lower pressure connection
Non-linearity:	<0,2% of span (BFSL per IEC 61298-2)
Non-repeatability:	<0,1% of span (per IEC 61298-2)
1-year stability:	<0,2% of span (at reference conditions)

Applications

The pressure transmitter is suitable for mechanical engineering, hydraulics, pneumatics, general industrial applications, food and beverage industry.

Photos: www.pixelio.de

Technical data (continued)

Supply

Output:	4...20 mA / 0...20 mA / 0...5 V:	10...30 VDC
	0...10 V:	14...30 VDC
Insulation voltage:	500 VDC	
	NEC Class 02 power supply (low voltage and low current maximum 100 VA even under fault condition)	
Wiring protection:	Overvoltage protection:	36 VDC
	Short-circuit:	S+ towards U-
	Reverse polarity:	U+ towards U-

Ambient conditions

Ambience temperature:	-20...+80 °C
Storage temperature:	-40...+100 °C
Medium:	-30...+100
Option:	-40...+125 °C
	-20...+60 °C (oxygen version)
Rated temperature range:	0...+80 °C
Temperature coefficient:	mean temperature coefficient (TC) within rated temperature range
TC zero:	<0,2% of span / 10 K
	<0,4% span / 10 K for ranges <250 mbar
TC span:	<0,2% span / 10 K
CE-conformity:	Pressure equipment directive: 97/23/EG
	EMC dirctive: 2004/108/EG
	EN 61326:Emission (Group 1, Class B) and immunityfor industrial locations
Shock resistance:	1000 g according IEC 60068-2-27 (mechanical shock)
Vibration resistance:	20 g according IEC 60068-2-6 (vibration under resonance)

Mechanics

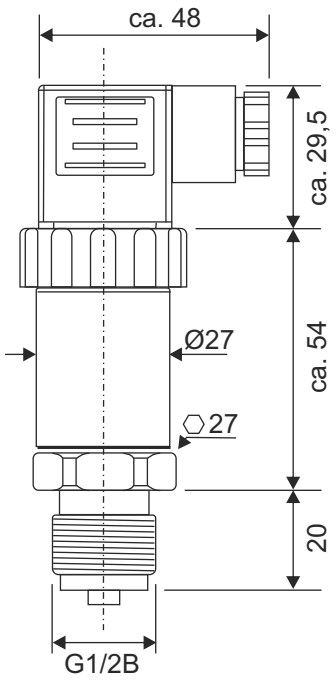
Material	Case:	CrNi steel
	Pressure connection:	316 Ti, in contact with medium
		oxygen version: above 40 bar F 1058
	Pressure sensor:	316 Ti (above 40 bar: 13-8 PH), in contact with medium
		oxygen version: above 40 bar F 1058
Transmission fluid:	syntetic oil (internal)	
	Halocarbon oil (oxygen version)	
	No transmission fluids for models with pressure ranges >25 bar	
Pressure connection:	G 1/2 (EN837) / G 1/4 (EN837) / G 1/4 (DIN 3852-E) / 1/2 NTP / 1/4 NPT	
	for NPT thread: nominal size for “US standard tapered pipe thread NPT”	
Electrical connection:	see page 4	
Ingress protection:	IP67 (IP65 for L-plug ”valve”)	
Weight:	approx. 200 g (for accuracy 0,25% approx. 300 g)	

Pressure table

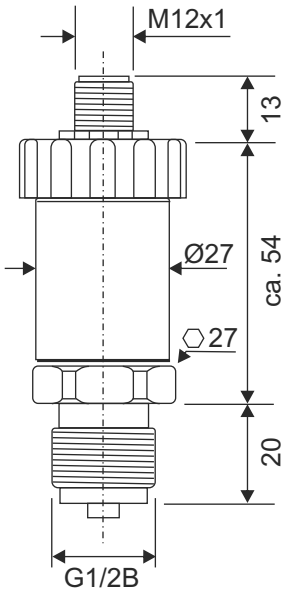
Pressure range	0,1	0,16	0,25	0,4	0,6	1	1,6	2,5
Overpressure safety	1	1,5	2	2	4	5	10	10
Burst pressure	2	2	2,4	2,4	4,8	6	12	12
Pressure range	4	6	10	16	25	40	60	100
Overpressure safety	17	35	35	80	50	80	120	200
Burst pressure	20,5	42	42	96	96	400	550	800
Pressure range	160	250	400	600	1000			
Overpressure safety	320	500	800	1200	1500			
Burst pressure	1000	1200	1700	2400	3000			

Dimensions (in mm)

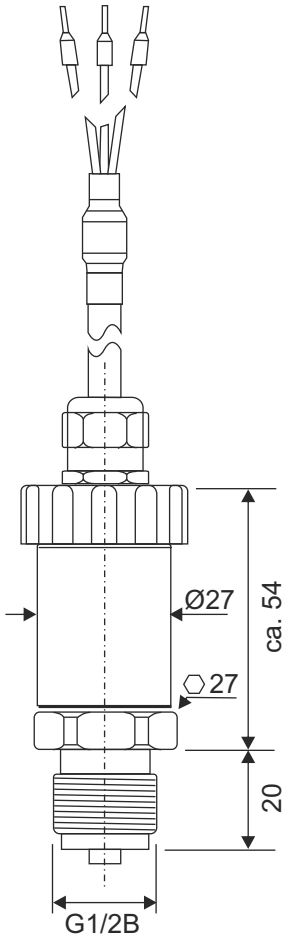
L-plug (valve) type A
DIN 175301-803



Circular connector
M12x1

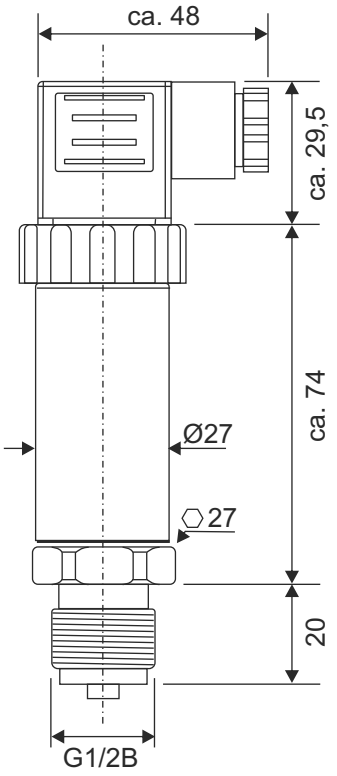


Cable output

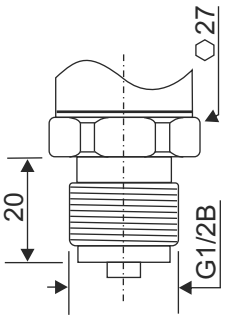
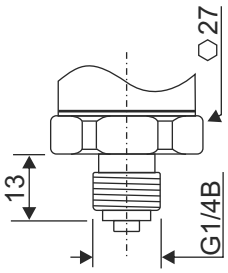
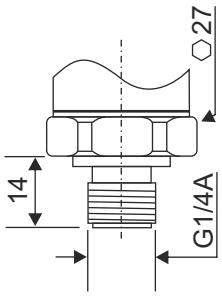
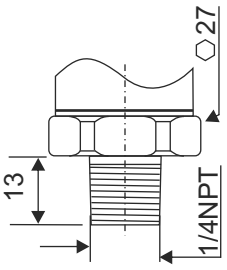
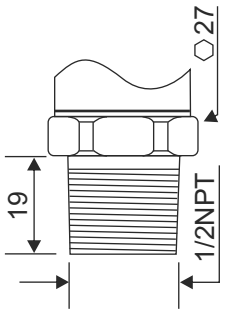


L-plug (valve) type A
DIN 175301-803

Case with accuracy
0,25%



Pressure connection (in mm)

G1/2B (EN837) manometer	G1/4B (EN837) manometer	G1/4A (DIN 3852-E)	1/4NPT	1/2NPT
		 Overload limit 600 bar		

Ordering code

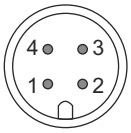
U	S	X	X	X	X	X	X	-	X	X	X

Kind of pressure:	relative pressure (0,5%)	0
	absolute pressure (0,5%)	1
	relative pressure (0,25%)	2
	absolute pressure (0,25%)	3
Contact with medium:	CrNi-steel (standard)	0
Output:	4...20 mA	0
	0...20 mA	1
	0...5 V	2
	0...10 V	3
Process connection:	G1/2” (EN 837), manometer	0
	G1/4” (EN 837), manometer	1
	G1/4” (DIN 3852 E)	2
	1/2”NPT	3
	1/4”NPT	4
Electrical connection:	L-plug DIN EN 175301-803 (type A)	0
	cable 1,5 m	1
	M12x1, 4-pole	2
Temperature medium:	-30...+100 °C	0
	-40...+125 °C	1
Sealing:	without	0
Pressure range:[1)]	(to specify)	X
Other:	special model	0

1) Pressure range absolute: 2 = 0...0,25 / 3 = 0...0,4 / 4 = 0...0,6 / 5 = 0...1 / 6 = 0...1,6 / 7 = 0...2,5 / 8 = 0...4 / 9 = 0...6 / A = 0...10 / B = 0...16 bar

Pressure range relative: 0 = 0...0,1 / 1 = 0...0,16 / 2 = 0...0,25 / 3 = 0...0,4 / 4 = 0...0,6 / 5 = 0...1 / 6 = 0...1,6 / 7 = 0...2,5 / 8 = 0...4 / 9 = 0...6 / A = 0...10 / B = 0...16 / C = 0...25 / D = 0...40 / E = 0...60 / F = 0...100 bar / G = 0...160 / H = 0...250 / I = 0...400 /

Electrical connection

	L-connector (valve) DIN 175301-803 A	Circular connector M12x1	Cable 4-pole
4...20 mA (2-wire)	U+ = 1 U- = 2	U+ = 1 U- = 3	U+ = brown U- = green
0...20 mA / 0...5 V / 0...10 V (3-wire)	U+ = 1 U- = 2 S+ = 3	U+ =1 U- = 3 S+ =4	U+ = brown U- = green S+ = white
Cable screen			grey
Wire gauge	up to maximum 1,5 mm²		0,5 mm² (AWG 20)
Diameter of cable	6...8 mm		6,8 mm
Length of cable			1,5 m
Ingress protection IEC 60529	IP 65	IP 67	IP67 or IP 68
	 View on connection	 Sicht auf Anschluss	
The ingress protection specified only apply while the pressure transmitter is connected with the female connectors that provide the corresponding ingress protection.			